COMPLETE LISTING OF CLAIMS

IN ASCENDING ORDER WITH STATUS INDICATOR

1. (Original) 1. A method of manufacturing a single crystal without using any seed crystal, comprising the steps of:

(a) preparing a raw material polycrystalline rod; and

(b) heating and melting the raw material polycrystalline rod to form a molten zone and then cooling and solidifying the molten zone successively in the length direction, such that a fiber-shaped single crystal, which is 3 mm or smaller in diameter, grows in the direction normal to the densest surface.

2. (Original) The method of manufacturing a single crystal as claimed in claim 1, wherein the single crystal is an oxide single crystal.

3. (Original) The method of manufacturing a single crystal as claimed in claim 1 or 2, wherein step (b) is performed using the Floating Zone Method.

4.(Original) The manufacturing method of a single crystal as claimed in claim 1 or 2, wherein step (b) is performed using the Laser Heated Pedestal Growth method.

5 - 7 (Cancelled)

8. (New) A method of manufacturing a single crystal without the necessity of using any seed crystal comprising:

(a) providing a $(Y,R)_3Fe_5O_{12}$ polycrystalline rod; and

(b) heating and melting the raw material polycrystalline rod to form a molten zone and then cooling and solidifying the molten zone successively in the length direction, such that a fiber-shaped single crystal, which is 3 mm or smaller in diameter, grows in the direction normal to the densest surface.

9. (New) The method of manufacturing a single crystal as claimed in claim 8, wherein heating and melting the raw material polycrystalline rod to form a molten zone and then cooling and solidifying the molten zone successively in the length direction, such that a fiber-shaped single crystal, which is 3 mm or is performed using the Floated Zone Method.

10. (New) The method of manufacturing a single crystal as claimed in claim 8, wherein heating and melting the raw material polycrystalline rod to form a molten zone and then cooling and solidifying the molten zone successively in the length direction, such that a fiber-shaped single crystal, which is 3 mm is performed by the Laser Heated Pedestal Growth Method.

11. (New) The method of manufacturing a single crystal as claimed in claim 8, wherein a seed crystal is not employed.

12. (New) A method of manufacturing a single crystal according to claim 11 wherein the polycrystalline rod is 3 mm or smaller in diameter.

13. (New) A method of manufacturing a single crystal according to claim 11wherein R is at least one element selected from the group consisting of Y and the rare earth elements of atomic numbers 57 to 71.

14. (New) The method of manufacturing a single crystal as claimed in claim 13 wherein the polycrystalline rod is a YIG polycrystalline rod.

15. (New) A method of manufacturing a single crystal according to claim 8 wherein the polycrystalline rod is 3 mm or smaller in diameter.

16. (New) A method of manufacturing a single crystal according to claim 8 wherein R is at least one element selected from the group consisting of Y and the rare earth elements of atomic numbers 57 to 71.

17. (New) The method of manufacturing a single crystal as claimed in claim 8 wherein the polycrystalline rod is a YIG polycrystalline rod.